Mercury levels lower, but still high

By Michelle Dunlop - Times-News writer

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SALMON FALLS CREEK RESERVOIR -- There's good news and bad news on mercury here.

The good news is that the latest round of water sampling at Salmon Falls Creek Reservoir shows that mercury levels are down from previous months.

The bad news?

"They're still very high," said Michael McIntyre, surface water program manager for the Idaho Department of Environmental Quality.

However, the levels could rise again.

DEQ, together with the U.S. Environmental Protection Agency, has launched a year-long monitoring program at the reservoir for mercury, a neurotoxin especially harmful to pregnant women and infants. Since the state has no major source of mercury emissions, officials have been curious about the cause of high mercury levels in the reservoir. On Tuesday, DEQ released to The Times-News a copy of results from water tests conducted in late October.

Mercury concentrations in water samples collected at the surface of Salmon Falls Creek Reservoir decreased from 1,000 nanograms per liter in September to 434 ng/L in October. Samples collected from water at the bottom of the reservoir in October showed mercury concentrations at 385 ng/L, down from 543 ng/L in September. At 16 ng/L, mercury can become a concern for aquatic life and for human health.

When mercury enters water, it can transform into methylmercury --- the form of concern to humans when they eat fish with high concentrations of the chemical. The state has issued a fish advisory for Salmon Falls Creek Reservoir.

The water that feeds into the reservoir didn't show levels of mercury nearly as high as water in the reservoir itself, McIntyre said. If mercury doesn't appear to be coming from the reservoir's water source, then where might it be coming from?

Early results pointed to mercury emissions blowing north from the Nevada gold mines as a potential source. However, the president of the Nevada Mining Association has suggested that other sources of mercury, such as the Idaho National Laboratory and old Idaho mining sites, should be examined as well.

Nevada mines have been involved in a voluntary mercury reduction program, and Nevada recently published a new regulatory program.

McIntyre says that the team will investigate four potential sources for the mercury in Salmon Falls Creek Reservoir: old mines in the area, hot springs, natural weathering of soils with high mercury concentrations and aerial disposition.

However, the strength and proximity of some of the sources put them in question, said Michael Abbott, an environmental scientist who works with the Idaho National Laboratory. Abbott has conducted air quality samples for DEQ and EPA's study at Salmon Falls Creek Reservoir.

"We know the wind patterns very well," Abbott said.

Results from air monitoring in July and August showed increased mercury when the wind blows from northern Nevada, which is the prevailing wind at Salmon Falls Creek Reservoir.

However, Abbott isn't ready to call the results conclusive.

"It's just not something we're going to figure out in a couple of months," he said.

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